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National Marine Sanctuary Program



Channel Islands National Marine Sanctuary

On June 10, the sanctuary gave a presentation about the Channel Islands aerial program to the Santa Barbara, California Chapter of the Experimental Aircraft Association. The lecture focused on the Lake Amphibian aircraft specifics and highlights of the Sanctuary Aerial Monitoring and Spatial Analysis Program. Of the over 30 members present, several were retired military. Numerous questions were asked regarding NOAA, the NOAA Corps, the Channel Islands and its aerial mission. The 30-minute lecture on the Channel Islands turned into almost 2 hours of questions.

Fagatele Bay National Marine Sanctuary

The second session of Camp Tifitifi, an environmental camp led by the sanctuary education staff was completed last Friday. It was held on the island of Aunu'u, with 15 participants in attendance. This is the first time the camp has been offered on the island of Aunu'u. In addition to environmental presentations and activities, participants were also taken on field trips to NOAA's National Weather Station on the main island of Tutuila and to the Land Grant Forestry and Agriculture extensions at the American Samoa Community College.

Florida Keys National Marine Sanctuary

A wonderful evening was enjoyed by seventy-five volunteers, staff and visitors at the Volunteer Recognition Reception hosted by the sanctuary and The Nature Conservancy. Guest speakers included the White House Advisor on Environmental Policy; Director, National Marine Sanctuary Program; Director of the Florida Keys Program of The Nature Conservancy; and Florida Keys National Marine Sanctuary Superintendent. Volunteers of the Year were recognized and presented an award for each of the Volunteer Projects in the sanctuary and The Nature Conservancy.

Flower Garden Banks National Marine Sanctuary

The sanctuary research team conducted a Remotely Operated Vehicle (ROV) cruise last week, as part of an ongoing effort to characterize the deepwater fish habitats both within the sanctuary and the surrounding reefs and banks in the northwestern Gulf of Mexico. The sanctuary team contracted the Phantom S2 ROV from University of Wilmington, N.C./ National Undersea Research Center to conduct the surveys. A planned 5-day cruise was cut short by a day due to inclement seas. A total of 11 surveys were conducted (19hrs 42mins) with depth ranges of 146' - 426'. Six surveys were conducted at McGrail Bank located approximately 45 miles east of the East Flower Garden bank. These surveys included 25 photographic transects quantifying several of the *Stephanocoenia* coral caps - reefs that are currently unprotected from activities other than those that are related to the oil and gas industry. Five

surveys were conducted at the West Flower Garden Bank. Five specimens were collected - gorgonians, antipatharians, and a soft coral (*Siphonogorgia sp.*) which will be identified/verified by Dr. Stephen Cairns of the Smithsonian Institute. Future collections are planned. These identifications will greatly enhance the characterization effort, as well as add to the knowledge of the deep communities in the Gulf of Mexico as a whole.

The sanctuary's Adaptations From the Depths 3rd grade classroom module was selected to receive \$800 toward development of the teacher kits. The money was awarded by Sea Space Dive and Adventure Travel Expo coordinators to the Gulf of Mexico Foundation's Flower Gardens Fund to be applied toward the module. Sponsored by the Houston Underwater Club and conducted almost entirely with volunteer labor, the annual 2-day-long Expo features commercial booths, an environmental awareness area with family-oriented activities, film festival, seminars, Intro to SCUBA classes, etc. Net proceeds from the expo go toward scholarships for college students pursuing ocean and coastal research and toward grants for special ocean projects. Sanctuary projects are frequently supported by these grants.

The sanctuary participated in the 2004 SeaSpace Exposition at the Reliant Center in Houston, Texas June 5 & 6. SeaSpace is marketed as the Southwest USA's premier Adventure Exposition, with a main focus on scuba diving. Sanctuary staff hosted activities each day in the "Kid's Space" featuring an innovative "create your own spawning reef" that looks similar to a snow globe. Sanctuary staff and volunteers answered questions and distributed information to approximately 1500 individuals in the Environmental Awareness area in the exhibit hall. Approximately 45 staff hours and 19 volunteer hours were spent over the course of the two-day event.

Gray's Reef National Marine Sanctuary

A three-week research cruise on the *R/V Nancy Foster* has concluded. The first leg of the cruise was aimed at comparing historical and burgeoning fisheries assessment techniques in the same temporal and spatial scales at Gray's Reef. Six different assessment methodologies were conducted at 10 independent sites per method in areas known to have high fishing activity and at 10 sites that have relatively less fishing activity. The cruise was a resounding success, and the data will be compiled into a report as it is analyzed and compared. This collaborative effort was comprised of scientists from NOAA's Fisheries, REEF, NASA, South Carolina Department of National Research, University of Georgia, Project Oceanica and the National Undersea Research Center. The second leg of the cruise was support for a new investigation into invertebrate recruitment processes, continued work on the web-based invertebrate ID guide, and collection of sponge specimens for genetic identification and comparison to more southern reefs that could be a source of Gray's Reef recruits. Representatives onboard were from Georgia Southern University, The University of Alabama at Birmingham, and EPA Region IV.

A very successful and action-packed teacher workshop was held last week by the sanctuary. The Ocean and Estuarine Science Workshop followed the general theme of Rivers to Reefs, beginning with explorations of the Altamaha River, followed by a day on Sapelo Island National Estuarine Research Reserve, a night searching for loggerhead sea turtle nests on Wassaw Island National Wildlife Refuge, and a day at the sanctuary aboard the Skidaway Institute of Oceanography R/V *Savannah*. Nine teachers from different parts of Georgia participated in this unique training opportunity. The workshop was also supported by Oatland Island Education Center and the county board of education through the Advisory Council member who helped to develop and implement the workshop.

Hawaiian Islands Humpback Whale National Marine Sanctuary

Sanctuary staff, along with the Hawaii Division of Aquatic Resources (DAR), were active in attempts to remove the 45-ft long carcass of a sperm whale that on two different occasions washed up onto reefs on the windward side of Oahu. DAR staff associated with the Hawaiian Islands Humpback Whale National Marine Sanctuary assisted NOAA Fisheries with the first removal on Friday, May 14, 2004. When the carcass unexpectedly drifted back on to a reef off Ka'a'awa on Monday, May 17, DAR took the lead in hiring a marine salvage contractor and overseeing the second removal. After consulting with University of Hawaii oceanographers on ocean current conditions, sanctuary staff directed the contractor to release the carcass approximately 5 miles west of Kaena Point. The contractor stayed with the carcass and noted a very slow drift towards the west, a direction expected to take the carcass well away from the islands. The sanctuary also coordinated with staff from NOAA Fisheries and the not-for-profit Hawaiian Islands Stranding Response Group who attached a VHF transmitter to the carcass during the second tow-out so that it could be tracked with a directional receiver.

Monitor National Marine Sanctuary

On June 17, the *USS Grasp (ARS 51)* departed the Naval Amphibious Base, Little Creek, VA, for a two-week expedition to the sanctuary. A sanctuary program specialist was aboard the *Grasp* for the initial phase of the expedition, which is to establish a 4-point mooring over the *Monitor*, conduct a reconnaissance of the site, and recover equipment left at the site by the Navy during the turret recovery expedition in 2002. The sanctuary manager also joined part of the expedition.

On June 15, the second of the *Monitor's* two gun carriages was removed from the turret by a team composed of conservators from The Mariners' Museum, archaeologists from the sanctuary, and heavy riggers from Northrop Grumman Newport News. Sanctuary staff have been assisting museum conservators inside the turret. Work will now continue to free the two large

cannons from their encrustations so they can be removed as well. The cannons, after more than a century in seawater, have become quite soft, so care must be taken to recover them without damaging the unique engravings on their breaches. Both were engraved after the famous battle of ironclads at Hampton Roads, VA, on March 9, 1862.

Monterey Bay National Marine Sanctuary

On May 20, at the Monterey Beach Resort, the sanctuary co-hosted with the Association of Monterey Bay Area Governments, a conference about regional desalination issues titled "Be Smart About Desal." The event consisted of 18 well recognized speakers on five panels addressing various topics including: introduction and basics of desalination, case studies, environmental impacts, mitigation measures, regional collaboration, permitting, federal and state perspectives, and local trends and issues. An Environmental Policy Specialist gave two presentations on existing and proposed facilities in the sanctuary and the sanctuary's collaborative regional action plan for desalination. The conference was well received by an audience of 210 people including: elected officials; desalination plant proponents; federal, state, and local agencies; industry representatives; environmental interests; and the general public.

The Fishermen's Fiesta held on June 5 at Municipal Wharf II in Monterey was well attended and a great success for a first-time event. Many folks commented on how much they enjoyed the fishing boat tours led by local fishermen. Other activities included ocean exhibits, fresh Monterey Bay seafood (celebrity chef John Pisto sold over 400 plates of grilled sardines!), abalone farm tours, history of fishing tours, and fishing presentations and activities at the Maritime Museum. Special children's activities included arts and crafts, a treasure hunt, and a hands-on fishing station. Sponsors included the sanctuary, the Alliance of Communities for Sustainable Fisheries, City of Monterey, Monterey History & Art Association and NOAA's BWET program.

Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve

On June 2, staff from Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve were guests on Hawaii Public Radio's "Think Tech Hawaii" program. This one-hour live broadcast focused on technology and maritime archaeology in the Pacific. NOAA's role as the sole agency actively involved in maritime heritage management in Hawaii was highlighted. Featured projects included the *in situ* study of the Japanese midget sub near Pearl Harbor, the *USS Saginaw* at Kure Atoll, and the ongoing search for Amelia Earhart's crash site near Howland Island. Heritage preservation as a part of stewardship and ocean awareness was emphasized. This show will be available on http://thinktechhawaii.com

Olympic Coast National Marine Sanctuary

Sanctuary Education and Outreach Coordinator Bob Steelquist received commendations from the Makah Tribe on the occasion of the 25th anniversary of the Makah Museum. The Tribe sponsored a 3-day celebration in honor of the museum, which houses artifacts from the excavation of the Makah village of Ozette, inundated approximately 500 years ago. Sanctuary Superintendent Carol Bernthal attended celebration events on Friday. Bob participated in the community dinner, with drumming, dancing, and potlatch, on Saturday. The sanctuary partners with the museum for a variety of visitor information, and education programs, as well as maritime heritage and paleoshoreline archaeology projects.

The NOAA Ship *McArthur II* completed its 22-day research cruise in the sanctuary. The cruise was divided into 2 legs; the first leg (May 22-June 1) focused on conducting marine mammal and seabird surveys along offshore waters during the day and seafloor mapping with side-scan sonar surveys during night operations. During leg 2 of the *McArthur II* research cruise, the emphasis shifted to exploratory surveys for deep-sea coral and sponge communities. Target sites were selected based on previous acoustic survey data (including side-scan images from leg 1) and seafloor substrate patterns. The Navy Phantom remotely operated vehicle was deployed to video-document presence of these communities. Also bottom grabs were conducted to further sample infaunal and epifaunal communities near hardbottom survey sites. One area revealed a fascinating find, when a rare hard coral (*Lophelia pertusa*) was recorded in a small patch at approximately 270 meters of water. Other areas revealed the presence of soft coral (gorgonians) and sponge communities with associated fish and other invertebrates.

West Coast National Marine Sanctuaries

The web pages featuring the shipwrecks *Winfield Scott* and *Cuba* has been expanded and now includes additional history, underwater imagery of the wreck sites, museum exhibits and survivor accounts. At the time of their loss, the two passenger steamers *Winfield Scott* (1853 loss) and *Cuba* (1923 loss) were engaged in servicing the Panama Route and were owned by the Pacific Mail Steamship Company. This online resource was developed for JASON XV PLUS students and the public to enhance awareness of the interesting linkage between the Channel Islands sanctuary and Panama. Dr. Robert Ballard's *JASON XV PLUS: Rainforests at the Crossroads*, which began this year with an expedition to Panama, is an ongoing student curriculum running through 2005. A new web page is being developed to feature the Monterey Bay National Marine Sanctuary's expedition to the shipwreck *Montebello*, a tanker torpedoed off Cambria, CA by the Japanese submarine I-21 just three weeks after Pearl Harbor.

R/V *Shearwater* completed the ninth and final Xantus's murrelet monitoring cruise of the season. During this final three-day cruise, nighttime surveys

were conducted at San Miguel, Santa Rosa and Santa Cruz Islands. During the two-and-a-half month project, scientists circumnavigated Anacapa, Santa Cruz, and Catalina Islands as well as most of San Miguel, Santa Rosa and Santa Barbara Islands, searching for birds, which congregate on the water adjacent to the islands. Lower than normal numbers of birds were spotted this year, and fewer nests were discovered on Anacapa Island than in five previous years. Of the nine nests being monitored at Anacapa, two have hatched. A photographer and a videographer from the "Jewels of the Pacific: The Channel Islands" project joined the trip to photograph and film the Xantus's murrelet monitoring project. On May 31, the R/V *Shearwater* departed for Monterey to support a ten-day research project for the Monterey Bay Nation Sanctuary.

National Marine Sanctuary Program

The "Sanctuary.Education@willamette.nos.noaa.gov" list serv has been popular over the last week. After announcing this list serv through the National Marine Educators Association Scuttlebutt, MPA Center Monthly Newsletter and the JASON Friday Memorandum, more than 150 people have asked to be subscribed. This list is designed to provide a mechanism to inform educators and scientist about the numerous opportunities available through the national marine sanctuaries.

The Marine Advanced Technology Education Center's National Remotely Operated Vehicle (ROV) competition took place in Santa Barbara on June 25-27. This year's competition scenario, which National Marine Sanctuary Program staff helped to develop, is based on a fictitious wreck in a sanctuary. Numerous sanctuary education staff helped mentor teams and conducted workshops in support of schools participating in this year's competition and were on hand to judge and observe the competition. Dan Basta was a featured speaker of the opening ceremonies on June 25th.

On June 9, the National Marine Sanctuary Program, in collaboration with the Institute for Exploration and Ventura County Superintendent of Schools Office, hosted a live broadcast with Ballard's research team during their "Return to Titanic" expedition on the NOAA R/V Ronald H. Brown. Current and potential Channel Islands telepresence partners were shown the live "Return to Titanic" program in order to see the quality of video and degree of interactivity afforded by telepresence. The goals were to showcase telepresence technology, introduce and highlight the future of Channel Islands Telepresence at Anacapa Island and participate in a brief survey related to the quality of audio/video during the live broadcast.

The Deputy Assistant Secretary of Commerce for Oceans and Atmosphere, and the chair for the White House's Council on Environmental Quality conducted a scuba dive June 17, 2004, to place the nation's first underwater geodetic marker at a coral reef in NOAA's Florida Keys National Marine Sanctuary. They were joined by the director of NOAA's National Marine

Sanctuary Program, and a marine biologist with the Florida Keys Sanctuary responsible for spearheading the restoration of the reef. The marker was installed at Molasses Reef off Key Largo the site of a major ship grounding that destroyed more than 5,000 meters of living corals in 1984. After years of careful, painstaking work, NOAA and partners succeeded in putting the reef on the road to recovery. Together with a highly visible surface buoy, the geodetic marker will serve as a navigational aid to boaters and divers. The marker will also allow researchers to precisely monitor the recovery of the reef over time. The story received extensive print and broadcast media coverage.